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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,656	07/15/2003	Klaus Hilbig	CM2504RQ	7175
27752 7590 09/27/2007 THE PROCTER & GAMBLE COMPANY INTELLECTUAL PROPERTY DIVISION - WEST BLDG. WINTON HILL BUSINESS CENTER - BOX 412 6250 CENTER HILL AVENUE CINCINNATI, OH 45224			EXAMINER FORTUNA, JOSE A	
			ART UNIT 1731	PAPER NUMBER
			MAIL DATE 09/27/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/619,656

Applicant(s)

HILBIG ET AL.

Examiner

José A. Fortuna

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the increasing of the caliper by the whole process, i.e., the embossing and the calendering, does not reasonably provide enablement for increasing the bulk just by calendering as claimed. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims. The specification is clear, see page 11, lines 7-14, reproduced below for applicants' convenience, that the embossing and calendering process gives a bulkier tissue as compared to the untreated web, i.e., without embossing and calendering:

"It has been surprisingly found that the embossing step described in combination with the calendering step leads to a rather thick and bulky and yet still very soft paper product. More particularly, it has been found that the paper tissue web after undergoing a stretch embossing step and a calendering step is of increased caliper as compared to the untreated web. (When e.g. three webs are calendered in one step the comparison is to be made between three layers of untreated web versus three layers of embossed and calendered web.) This effect is particularly surprising, as calendering with a high pressure is known to reduce the caliper of a paper web considerably, as for example stated in German patent application DE O 44 14 238.2."

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 is vague and indefinite as how the calendering increases the bulk of the web; see also above.

Claim 1 is also vague and indefinite since the basis for the increasing caliper is missing, i.e., 10% increase with respect to what, the embossed not calendered tissue, the calendered not embossed tissue, the tissue without calendering nor embossing?

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wells, US Patent No. 3,414,459 with or without (Kamps et al., US Patent No. 5,702,571) and further evidenced by Chen et al. US Patent No. 5,990,371 or Luu et al., US Patent No. 6,352,700.

Regarding claims 1-7, Wells teaches a tissue paper comprising multiple plies in which the plies are embossed with embossing rolls having from 16 to 400 protuberances/elements per square inch, (2.48 to 62 protuberances/elements per square centimeters), column 5, lines 62-65, and then calendered by passing it through a calender nip at lineal pressures between 0.5 to 60 pounds per lineal inch, (0.876 N/cm to 105.1 N/cm), column 5, lines 43-61. Wells, in column 3, lines 64 through 66, teaches that the web is embossed by passing it through a nip between an steel roll, (the hard roll) and an rubber covered roll, (the rubber material roll). Wells teaches that the web is formed by embossing at least two plies then laminating said at least two plies and then calendering the embossed-laminated plies, column 1, lines 51-55 and column 5, lines 6-16. Even though the step of cutting is not explicitly recited, the tissues need to be cut in order to the desired consumer product, i.e., paper towel, facial tissues, toilet tissues, etc., therefore, this limitation is also met. Wells does not explicitly teach the addition of a lotion to the embossed, calendered web. However, the use of lotions, emollients and other additives in tissues is conventional in the art and therefore, the use of lotion would have been obvious to one of ordinary skill in the art, see Chen et al. or Luu et al.¹, just to mention a couple.

¹ These references teach the use of lotion on tissues.

Note also that the use of embossing with embossing rolls having density of embossing elements greater than 30 elements/cm² is well known in the art as shown by the reference Kamps et al., as explained below:

- Kamps et al., US Patent No. 5,702,571, teaches using reduced height elements between 0.25 mm to 2.5 mm, see paragraph bridging columns 3 and 4 and teaches the advantages of using such heights along with embossing elements having embossing rolls having high density of elements, i.e., in the same range as claimed, at least 30 embossing elements per square inch. Kamps et al teach the advantages in the paragraph bridging columns 1 and 2, reproduced below:

“It has now been discovered that a strong, soft and bulky tissue sheet of premium quality can be produced from basesheets made with conventional tissue making assets, although the method of this invention can also be used to improve premium quality basesheets as well. (As used herein, a tissue "basesheet" is a tissue sheet as produced on a tissue machine and wound up, prior to any post treatment such as the embossing method of this invention. The tissue basesheet can be layered or blended, creped or uncreped. A tissue "sheet" is a single-ply sheet of tissue, which can be a tissue basesheet or a post-treated tissue basesheet. A tissue "product" is a final product consisting of one or more tissue sheets.) A premium quality tissue sheet has a Strength (hereinafter defined) of 500 grams or greater, a Bulk (hereinafter defined) of 6 cubic centimeters per gram or greater, and a softness, as measured by the Specific Elastic Modulus (hereinafter defined) of 4 or less. The invention utilizes a debonding method in which fine-scale,

discrete, intermeshing embossing elements of two gendered (male and female) embossing rolls inelastically strain the tissue sheet, thereby rupturing the weak bonds and opening up the structure both internally and externally. When the method of this invention inelastically strains the sheet externally, the sheet has increased surface fuzziness, which can improve softness. When the method of this invention inelastically strains the sheet internally, the sheet is more limp (less stiff) with a lower Specific Elastic Modulus (increased softness) and significantly greater Bulk. In most cases, the Strength of the sheet is substantially unaffected. Depending on the properties of the sheet to which the method of this invention is applied, the resulting product will have different characteristics, but will always be improved in terms of softness and Bulk, preferably without significant loss of Strength.”

Therefore, embossing the tissues as taught by Kamps et al. would have been obvious to one of ordinary skill in the art in order to obtain the advantages discussed above.

As to the transfer of the lotion, one of ordinary skill in the art would have expected similar ratio as claimed. Applicants examples demonstrate that the same claimed ratio of lotion is transferred irrespectively if the tissue is embossed or not, i.e., the data shown on page 9 of the present application, clearly teach that the dynamic transfer is more that double of the static transfer, 21.83% vs. 5.14%. One of ordinary skill in the art would expect at least similar trend if the tissues of the primary references were lotioned.

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Response to Arguments

8. Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure in the art of "Embossed- Calendered tissues."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to José A. Fortuna whose telephone number is 571-272-1188. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

José A Fortuna
/José A. Fortuna/
Primary Examiner
Art Unit 1731

JAF